

## FIELD REPORT

Project Number 98-511-66 Project Name BENNETT VALLEY ☐ (ESOW)

Date 7/6/05

Name M. JACKSON

Project Manager \_\_\_\_\_

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### Activity Description

PG+E READING - 36629

TOTALIZER - 01,233,652 GALS.

RATE THOUGHT

TOTALIZER - 16 GPM

EX-1 - 20 PSI

EX-2 - 20 PSI

EX-3 - 20 PSI

TANK PRESSURE - 150 PSI

LEL - ~~Q~~ OUT

TOOK CARBON SAMPLES (EFFLUENT, MID, INFLUENT)  
FROM SYSTEM

START UP

Project Number: 98-511-66

Totalizer: 01,269,127

Valve Position: *F1/2*

Electric Meter: 36721 kwh

TANK PRESSURE 150 PSI

SP-6: On / Off      Air Pressure: \_\_\_\_\_ psi      Flow Rate: \_\_\_\_\_ scfm

Air Regulator Setting: \_\_\_\_\_ psi

## COMMENTS

# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 7/18/05

Time: 13:50

Project Number: 98-511-66

System Status: On / Off Compressor Hours:           

Totalizer: 01,283,613

## GROUND WATER SYSTEM

Ex-1: (On) / Off

Psi: 20

Valve Position: F/O

Ex-2: (On) / Off

Psi: 20

Valve Position: F/O

Ex-3: (On) / Off

Psi: 20

Valve Position: F/O

Pre-Filter Inlet Psi:            Pre-Filter Outlet Psi:            Filter Changed: Yes

DISCHARGE LEL 2 %

AIR LEL Meter: 2 %

Electric Meter: 36810 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure:            psi Flow Rate:            scfm

SP-2: On / Off Air Pressure:            psi Flow Rate:            scfm

SP-3: On / Off Air Pressure:            psi Flow Rate:            scfm

SP-4: On / Off Air Pressure:            psi Flow Rate:            scfm

SP-5: On / Off Air Pressure:            psi Flow Rate:            scfm

SP-6: On / Off Air Pressure:            psi Flow Rate:            scfm

Air Regulator Setting:            psi

## COMMENTS

BENTS SHIPPED OFF AGAIN. BOTH!  
SYSTEM DOWN. PULHYS NOT CENTERED, OFF BY ONE  
BENT. CENTER PULHYS + RE-START SYSTEM.



# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 7/20/05 Time: 13:40

Project Number: 98-511-66

System Status: On / Off Compressor Hours:        Totalizer: 01,302,929

## GROUND WATER SYSTEM

Ex-1: On / Off Psi: 20 Valve Position: F/O

Ex-2: On / Off Psi: 20 Valve Position: F/O

Ex-3: On / Off Psi: 20 Valve Position: F/O

Pre-Filter Inlet Psi:        Pre-Filter Outlet Psi:        Filter Changed: Yes/No

DISCHARGE LEL METER 2 90  
AIR LEL Meter: 2 %

Electric Meter: 36861 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-2: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-3: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-4: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-5: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-6: On / Off Air Pressure:        psi Flow Rate:        scfm

Air Regulator Setting:        psi

## COMMENTS

SYSTEM RUNNING UPON ARRIVAL.  
ALL WORKING FINE.



Date: 7/28/05 Time: 10:42 Project Number: 98-511-66  
System Status On Off Compressor Hours:            Totalizer: 01,375,885

Ex-1: On / Off      Psi: 20      Valve Position: F/O

Ex-2: On / Off      Psi: 20      Valve Position: F/O

Ex-3: On / Off      Psi: 20      Valve Position: F/O

AIR LEL METER: 0 %  
DISCHARGE LEL Meter: 0 %

Electric Meter: 37027 kwh

SP-1: On / Off	Air Pressure: _____ psi	Flow Rate: _____ scfm
SP-2: On / Off	Air Pressure: _____ psi	Flow Rate: _____ scfm
SP-3: On / Off	Air Pressure: _____ psi	Flow Rate: _____ scfm
SP-4: On / Off	Air Pressure: _____ psi	Flow Rate: _____ scfm
SP-5: On / Off	Air Pressure: _____ psi	Flow Rate: _____ scfm
SP-6: On / Off	Air Pressure: _____ psi	Flow Rate: _____ scfm

Air Regulator Setting: \_\_\_\_\_ psi

## COMMENTS

# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 8/3/05 Time: 13:25 Project Number: 98-511-55

System Status: (On) Off Compressor Hours: N/A Totalizer: 01,430,256

## GROUND WATER SYSTEM

Ex-1: On / Off Psi: 20 Valve Position: E/O

Ex-2: On / Off Psi: 20 Valve Position: F/O

Ex-3: On / Off Psi: 20 Valve Position: F/O

Pre-Filter Inlet Psi: — Pre-Filter Outlet Psi: — Filter Changed: YES

AIR LEAK METER 0%  
DISCHARGE METER: 0% Electric Meter: 37151 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-2: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-3: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-4: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-5: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-6: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

Air Regulator Setting: \_\_\_\_\_ psi

## COMMENTS

ALL RUNNING GOOD, NO PROBLEMS,

# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 8/15/05 Time: 13:35 Project Number: 98-511-66

System Status: On / Off Compressor Hours:        Totalizer: 01,528,525

## GROUND WATER SYSTEM

Ex-1: On / Off Psi: 30 Valve Position: F/O

Ex-2: On / Off Psi: 30 Valve Position: F/O

Ex-3: On / Off Psi: 30 Valve Position: F/O

Pre-Filter Inlet Psi:        Pre-Filter Outlet Psi:        Filter Changed: Yes / No

DISCHARGE LEL METER 2 %  
AIR LEL Meter: 0 %

Electric Meter: 37384 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-2: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-3: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-4: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-5: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-6: On / Off Air Pressure:        psi Flow Rate:        scfm

Air Regulator Setting:        psi

## COMMENTS

TURN AIR TO PUMP UP FROM 20 PSI TO 30 PSI  
ALL RUNNING GOOD



## FIELD REPORT

Project Number 98-511-66 Project Name BENNETT VALLEY ☐ (ESOW)

Date 9/9/05

Name M. JACKSON

Project Manager \_\_\_\_\_

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### Activity Description

12:30

PG-9E METER - 38271

TOTALIZER - 01,912,607 GALS.

PUMP PRESSURE - 30 P.S.I.

LEL'S - 0%

COMPRESSOR: OIL GOOD. PRESSURE 150 P.S.I.

AUTO DRAIN: WORKING

# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 9/21/05

Time: 13:45

Project Number: 98-511-66

System Status: (On) / Off Compressor Hours:       

Totalizer: 02,081,415

## GROUND WATER SYSTEM

Ex-1: (On) / Off Psi: 30

Valve Position: F/O

Ex-2: (On) / Off Psi: 30

Valve Position: F/O

Ex-3: (On) / Off Psi: 30

Valve Position: F/O

Pre-Filter Inlet Psi:        Pre-Filter Outlet Psi:        Filter Changed: Yes / No NA

DIS. LEL METER 8 %  
AIR LEL Meter: -3 %

Electric Meter: 38671 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-2: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-3: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-4: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-5: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-6: On / Off Air Pressure:        psi Flow Rate:        scfm

Air Regulator Setting:        psi

## COMMENTS

WILL NEED OIL CHANGE IN ABOUT 2 WKS.

AHL EEE RUNNING GOOD.

# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 9/28/05 Time: 11:00 Project Number: 98-511-66  
System Status: On / Off Compressor Hours: N/A Totalizer: 02,177,587

## GROUND WATER SYSTEM

Ex-1: On / Off Psi: 30 Valve Position: FO  
Ex-2: On / Off Psi: 30 Valve Position: FO  
Ex-3: On / Off Psi: 30 Valve Position: FO

Pre-Filter Inlet Psi:      Pre-Filter Outlet Psi:      Filter Changed: Yes / No

LEL Meter: 0 % Electric Meter: 38901 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure:      psi Flow Rate:      scfm  
SP-2: On / Off Air Pressure:      psi Flow Rate:      scfm  
SP-3: On / Off Air Pressure:      psi Flow Rate:      scfm  
SP-4: On / Off Air Pressure:      psi Flow Rate:      scfm  
SP-5: On / Off Air Pressure:      psi Flow Rate:      scfm  
SP-6: On / Off Air Pressure:      psi Flow Rate:      scfm

Air Regulator Setting:      psi

## COMMENTS

ALL RUNNING GOOD.



# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 10/3/05

Time: 12:00

Project Number: 98-511-66

System Status: On / Off Compressor Hours:       

Totalizer: 02,246,194

## GROUND WATER SYSTEM

Ex-1: On / Off Psi: 30

Valve Position: F/O

Ex-2: On / Off Psi: 30

Valve Position: F/O

Ex-3: On / Off Psi: 30

Valve Position: F/O

Pre-Filter Inlet Psi:        Pre-Filter Outlet Psi:        Filter Changed: Yes/No

LEL Meter: 0 %

Electric Meter: 39066 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-2: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-3: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-4: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-5: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-6: On / Off Air Pressure:        psi Flow Rate:        scfm

Air Regulator Setting:        psi

## COMMENTS

TOOK EFFLUENT, MID, INFILTRANT SAMPLES FROM CARBONS,

# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 10/20/05 Time: 10:30 Project Number: 98-511-66

System Status: (On) / Off Compressor Hours:        Totalizer: 02,360,758

## GROUND WATER SYSTEM

Ex-1: (On) / Off Psi: 30 Valve Position: F/O

Ex-2: (On) / Off Psi: 30 Valve Position: F/O

Ex-3: (On) / Off Psi: 30 Valve Position: F/O

Pre-Filter Inlet Psi:        Pre-Filter Outlet Psi:        Filter Changed: Yes / No

LEL Meter: 0 % Electric Meter: 39336 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-2: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-3: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-4: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-5: On / Off Air Pressure:        psi Flow Rate:        scfm

SP-6: On / Off Air Pressure:        psi Flow Rate:        scfm

Air Regulator Setting:        psi

## COMMENTS

PRODUCT THICKENS 0.03 IN.

SYSTEM RUNNING UPON ARRIVAL, ALL GOOD.

# Bennett Valley Ground Water System Operation and Maintenance Log

Date: 10/27/05 Time: 12:00 Project Number: 98-511-66

System Status: On / Off Compressor Hours: N/A Totalizer: 02,452,479

## GROUND WATER SYSTEM

Ex-1: On / Off Psi: 30 Valve Position: F/O

Ex-2: On / Off Psi: 30 Valve Position: F/O

Ex-3: On / Off Psi: 30 Valve Position: F/O

Pre-Filter Inlet Psi: \_\_\_\_\_ Pre-Filter Outlet Psi: \_\_\_\_\_ Filter Changed: Yes / No

LEL Meter: 0 % Electric Meter: 39545 kwh

## AIR SPARGE SYSTEM

SP-1: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-2: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-3: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-4: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-5: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

SP-6: On / Off Air Pressure: \_\_\_\_\_ psi Flow Rate: \_\_\_\_\_ scfm

Air Regulator Setting: \_\_\_\_\_ psi

## COMMENTS

PZ-1 - D.T.W.

PZ-1 - 10:05

MW-6 - 11.19

MW-7 - 11.73

MW-16 - 12.16

MW-17 - 13.52



**APPENDIX D**

**WATER SAMPLING DATA SHEETS**

## **ECM STANDARD OPERATING PROCEDURE**

### **GROUND WATER SAMPLING**

The following describes sampling procedures used by ECM field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed 10%).

Ground water samples are collected from the wells/borings with steam-cleaned or disposable Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the ECM field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.